

August Mixed Waste Subgroup Highlights

The Hanford STCG Mixed Waste Subgroup met on August 13, 1998 in the ETB Wenatchee River Room. Wayne Lechelt, PNNL, gave a presentation on the Ground Penetrating Radar (GPR) work being done at Hanford. The need is to find out the condition of drummed waste that is buried as retrievable waste in trenches. PNNL has been using GPR for years to find radioactive hot spots at or near the surface. A year ago they began to work on detecting deeper buried waste with CH₂M Hill at Hanford. Work was first done at a demonstration site to calibrate the GPR equipment and to test whether buried objects of various shapes could be seen. Lower frequency GPR equipment is used first to quickly determine the boundary of the trench. Then higher resolution GPR is used to pinpoint hot spots or other areas of interest. Wayne showed pictures of various objects that the GPR had detected including pipes, tiered barrels, tanks and other buried objects. The GPR system was next tested at the 618-4 Site where it was used to identify buried boxes of waste. This FY a cultural study was done with the GPR system on Locke Island to identify buried Native American artifacts. The GPR system used to date has been a single-array system. With a multi-array system you could obtain almost real time data. The multi-array system still needs more development time.

Norm Olson reviewed the MW Science and Technology Needs for FY99. There are 18 MW technology needs this year. Six of these needs are the same as last year with improved descriptions and new waste volumes. There are also seven new needs from the Waste Management group at Hanford, four new needs from the liquid effluent facility group and one new need from the 222-S laboratory group. The six MW science needs are the same as last year's submittal. All waste stream identification numbers for each technology need were taken from the Hanford waste disposition maps. The biggest change in waste volumes was the exclusion of future tank waste. Norm wants all subgroup members' comments to him by August 25. Norm will work with Larbi Bounini and Ellen Dagan to put together the presentation for the STCG Management Council on August 27.

Norm reviewed the Spent Nuclear Fuel (SNF) technology needs next. There are six technology needs of which three are new ones identified this year and the other three needs were transferred from the D&D Subgroup list to SNF. All of the six needs were reviewed by the MW Subgroup. All three of the new needs and one of the older ones have Technology Insertion Points (TIPs) associated with them. There were no science needs for SNF identified this year. Don Engelman will be accepting comments/changes to these needs until August 25.

Norm stated that there has been no word on the PCB instrumentation kit ASTD proposal that the Mixed Waste Subgroup endorsed. Each focus area is reviewing its budgets and deciding what to fund. Work continued on the boxed waste assay system proposal to obtain WIPP certification for the new technology. Larbi Bounini has been working with the MWFA and has compiled a list of needs for the system. In addition, the amount of funding to be requested from EM-50 vs. EM-30 was estimated. The MWFA is going to meet with WIPP and then DOE-HQ to make sure everyone is on board with this approach. Then the MWFA will get back to us to put together the TTP for the project. Larbi has also developed and given the MWFA the requirements to meet one of our high priority needs, the characterization of long-length equipment to separate TRU

from non-TRU portions. The MWFA will then issue an RFP to meet this need and review the proposals received. The MWFA has said they are interested in finding a viable solution to this need.

Norm distributed a description of the five TIPs from Waste Management developed to date. These five all match one of the MW needs on this year's list. Wayne Ross then reviewed the results of work he has done on the Solid Waste EIS. Three alternatives are being examined and compared, and the path for each alternative identified in more detail. Wayne reviewed the results of the EIS for each specific waste type, i.e. TRU, MLLW, etc.

The next MW Subgroup meeting will be on September 10 at 1:00 p.m. in the EESB Chinook Room.

Mixed Waste Subgroup Meeting Attendees - 6/11/98

Theresa Aldridge	RL-STP	372-4508
Ted Anderson	BHI	372-9343
John April	BHI	372-9126
Larbi Bounini	WMH	376-4650
Ellen Dagan	DOE-RL	376-3811
Wayne Lechelt	PNNL	375-2926
Norm Olson	FDH-TM	372-4810
Wayne Ross	PNNL	372-4684
Steve Weakley	PNNL	372-4275